U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472

FEMA

February 4, 2011

The Honorable Carl Levin
United States Senator
Washington, DC 20210

Dear Senator Levin:

Thank you for your letter dated October 5, 2010, to the Department of Homeland Security, Federal Emergency Management Agency (FEMA). In your letter you asked several questions regarding the status of the National Flood Insurance Program (NFIP), its costs to Michigan property owners, and the methodology used to determine rates.

I would like to answer the questions you raised in your letter individually.

1. In your first question you raised three issues: (a) Michigan flood insurance premiums exceeded claims paid by $222 million, (b) you are concerned that the fact that FEMA uses a nationwide rating systems probably results in Michigan residents cross-subsidizing other higher-risk geographic areas, and (c) the fact that average premium for Michigan policyholders exceeds the average premiums for every Gulf state.

First, let us consider the statistic that Michigan residents have paid $222 million more in premium than they have received claims[1]. We believe that this is primarily due to the fortuitous flooding experience that Michigan has experienced during most of the existence of the National Flood Insurance Program. So, the fact that Michigan residents have paid significantly more in premiums than they have received in claims paid is not necessarily indicative of inequity in premium but rather of the variability of flooding, which evens out over hundreds of years, not over the short 40 year history of the NFIP. In calendar years 1985 and 1986 Michigan's claims far outweighed their premiums by $13 million. Adjusting for inflation and the number of insured structures then and now, the losses in 1985 and 1986 are estimated to be in the $40 - $50 million range. And these years do not necessarily represent the highest possible loss in Michigan. Even Florida has paid more in premiums than it has received in losses, nearly $7 billion at the end of 2009. But one significant flooding event only half the size of Katrina could easily reverse the surplus.

Next, let me assure you that Michigan policyholders are not subsidizing higher risk areas because the NFIP utilizes a nationwide rating system. To understand how our nationwide system works, I need to begin with an overview of both our mapping activity and insurance pricing.

[1] The GAO number of $222 million is a trended number that was their best attempt to bring past experience into present dollars. The NFIP actual untrended experience for Michigan shows that from 1978 through 2009, premiums exceeded program expenses (claims and administrative expenses) by $84 million. Michigan NFIP premium was $213 million while claims payments totaled $44 million and administrative expenses were $85 million. Please note that the NFIP expense ratio is similar to the expense ratios that are part of homeowner's insurance, fire insurance, and other property insurance that Michigan residents pay. Those expenses cover such items as claims handling expenses, agents' commissions, state premium tax, certain administrative expenses of FEMA and insurance company expenses.

Both Michigan and the Gulf area have a risk of flooding; the Gulf area, however, is clearly greater. In both Michigan and the Gulf there are areas susceptible to flooding. FEMA's mapping effort recognizes that and identifies those areas as Special Flood Hazard Areas (SHFAs) where the risk of flooding in any one year is one percent or greater. Because the risk of flooding in the Gulf area is so much greater, the SFHAs in the Gulf area are larger than those of Michigan. In addition, there are two types of SFHAs: those where flooding events include the additional damaging hazard of wave action and those where wave action is non-existent or minor. The former are designated as V-Zones while the latter are designated as A-Zones. These roughly correspond to coastal versus riverine flood zones. NFIP premiums are much higher in the V-Zones.

NFIP premiums are based on a variety of factors, but the most important one for those structures in the flood zone is the elevation of the structure relative to the flood risk. So premiums are highest for those structures built below the Base Flood Elevation (BFE – the height that flood waters are estimated to rise during a 1% annual chance flooding event,) while premiums are significantly lower for those structures that are elevated above the BFE. For structures that are in the A-Zone, the rate in Michigan for a structure that is 1-foot above the BFE is the same as a structure in Florida or Louisiana that is also 1-foot above the BFE. The probability of flood waters entering the structure is roughly the same for both of these structures; that is because the flood maps identify what the elevation is for the "one-percent annual chance flood" in both communities. While there are some variations in the probabilities depending upon the slope of the terrain in the SFHA, the indicated rate does not materially vary as the slope varies. This is why, for simplicity of administering the program, early in the history of the Program, FEMA changed from rates that varied within a community, depending upon the varying slope of the terrain in the community, to a nationwide rating system.

Let me conclude this discussion of the nationwide rating system by pointing out the one exception: rates for Post-FIRM construction (buildings constructed after a Flood Insurance Rate Map was in effect,) that are more than one-foot below BFE are individually-rated. This is because the flood risk for these non-compliant structures is so high and can vary significantly because of the individual characteristics of the building.

Next, I would like to address the appearance that the average premium for Michigan policyholders is higher than the average premium for Gulf Coast states. This is not a reflection that Michigan Policyholders' premiums are comparatively excessive; rather, the difference is primarily due to the distribution of policyholders with low risk, and correspondingly low premiums, and policyholders with high risk, and correspondingly high premiums.

A comparison of Michigan average premiums and the consolidated average premiums for the Gulf states are shown below.

	Michigan		Gulf States	
Zone	Distribution	Avg Prem	Distribution	Avg Prem
VE + Elev	N/A	N/A	0.3%	1,987.91
VE 0 Elev	N/A	N/A	0.0%	3,624.06
VE – Elev	N/A	N/A	0.1%	5,231.49
AE + Elev	9.3%	302.49	19.6%	374.46
AE 0 Elev	2.5%	622.93	6.1%	868.62
AE – Elev	2.5%	982.30	0.9%	1,992.67
Other A	0.1%	309.98	11.8%	354.16
Subsidized	60.4%	834.64	14.0%	1,024.89
X – Standard	7.3%	716.80	4.4%	934.59
X – Preferred	16.4%	317.74	40.5%	306.60
All Other	1.4%	897.11	2.2%	640.54
TOTAL	100.0%	690.46	100.0%	523.79

The above exhibit (which excludes condominiums) shows the distribution of non-condo[2] policyholders by risk classification for the Gulf Coast States, and for Michigan. Note that the differences within each category are minor, and, in fact, Michigan residents often have lower premiums within a given category.

2. In your second question you asked what steps FEMA has taken to ensure the disparity in claims from repetitive loss properties is accurately reflected in premium rates for those properties.

To understand the steps FEMA has taken to ensure that the true flooding risk of these repetitive loss properties is reflected in the premiums charged, I will begin with an overview of the NFIP rate

[2] Condos were excluded from the exhibit because premiums associated with an entire condo building can be significantly higher than other structures such as a single-family home, while premium per condo unit can be much lower than other structures because only the first one or two floors are usually subject to flood risk

structure. There are basically two major classes of NFIP rates: full-risk rates and discounted (commonly referred to as "subsidized",) rates. Full-risk rates reflect the true long-term expected losses for the structure, including the very rare but catastrophic event. Discounted premiums are just that: rates that are less than the full-risk rate for the class.

Most of the repetitive loss properties are older properties that qualify for discounted premiums. However, a review of our repetitive loss properties has revealed that about 5 percent of those properties are paying full-risk premiums. These are primarily newer, Post-FIRM properties that were built unwisely and are charged actuarial premiums that fully reflect their flood-risk. In addition, whenever a structure that is currently mapped as being outside the SFHA becomes a repetitive loss property, it loses its eligibility for the Preferred Risk Policy (PRP), which is the NFIP's lowest cost class of premiums. While that is not a complete solution, it does partially address the flood risk of those policies.

FEMA has undertaken a multi-faceted approach to address the impact of repetitive loss properties on the NFIP. (1) FEMA recently increased deductibles from $1,000 to $2,000. While this increased deductible applies to all discounted policyholders, it is most acutely felt by our repetitive loss policyholders since they have to pay that deductible for each future loss. (2) FEMA administers a variety of mitigation programs that give priority to these repetitive loss properties. FEMA estimates that over the last 30 years approximately 70,000 repetitive loss buildings have been mitigated through various governmental programs, including FEMA's programs. (3) FEMA has also lessened the impact of repetitive loss properties by helping to assure that new construction is built wisely so that it will not join the ranks of the repetitive loss properties. FEMA has done this by working with local communities to ensure adoption and enforcement of meaningful floodplain ordinances. (4) FEMA works closely with local communities to identify their repetitive loss properties and to develop appropriate plans to address the source of flooding and mitigate as many of the affected structures as possible. FEMA rewards the communities for successful efforts through Community Rating System discounts that result in lower premiums when they are taking strides to reduce flood risk.

FEMA recognizes that although many successful steps have been taken to reduce the repetitive loss problem, the problem it poses to the Program is still significant. We will continue to investigate and evaluate potential future improvements as they are identified.

3. In your third question you asked what FEMA is doing to incorporate more recent data into its flood maps and how FEMA is incorporating climate change in its rate setting process.

Concerning the GAO report that you cited it states that "FEMA relies on flood probabilities from the 1980s and damage estimates that do not fully reflect recent NFIP damage experience." GAO's concern in that report is primarily how those items impact the NFIP's rate-setting process. FEMA performed a sensitivity analysis on the impact of the probability estimates on rates, and preliminarily concluded there would be a minimal impact. However, FEMA is currently undertaking a review of

its probability estimates and damage estimates to validate their accuracy. We expect to have the first round of analysis completed in 2011.

Regarding how FEMA is incorporating climate change in its rate setting process, FEMA will be publishing a climate change report in 2011. The report will be the first step in examining how all areas of the NFIP may be affected by climate change. Additionally, more detailed studies will be required to understand when and if specific rating adjustments are warranted.

I hope this information addresses your concerns. If you need additional information or assistance, please have a member of your staff contact the FEMA Legislative Affairs Division by telephone at (202) 646-4500.

Sincerely,

Edward L. Connor
Acting Federal Insurance and Mitigation Administrator
National Flood Insurance Program

cc: Andrew Velasquez III, Regional Administrator, FEMA Region V
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